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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/843,637   | 04/26/2001  | Shuhei Marukawa      | 10873.703US01       | 9215             |
| 23552  | 7590        | 07/13/2004           | EXAMINER            |                  |
| MERCHANT & GOULD PC<br>P.O. BOX 2903<br>MINNEAPOLIS, MN 55402-0903 |             |                      | CHANEY, CAROL DIANE |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1745                |                  |
| DATE MAILED: 07/13/2004  |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

### Application No.

09/843,637

### Applicant(s)

MARUKAWA ET AL.

### Examiner

Carol Chaney

### Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 and 2 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC §102***

The texts of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimakawa et al., US Patent 5,817,435, for essentially the reasons of record.

Shimakawa et al. disclose a battery comprising two end plates (33) and a plurality of cells (10) stacked adjacent to each other and bound by the end plates. The cells include a casing (12) of polyphenylene ether, polystyrene and preferably an elastomer. (column 3, lines 50-55.) The dimensions of the end plates and the binding members, which determine binding forces, are set in part by the number of stacked cells in the battery. (Column 6, lines 13-28.) The end plates and binding rods will cause the battery containers to be compressed immediately after assembly. As can be seen from Table 3 in column 8 of the Shimakawa et al. reference, battery casings were held at 60°C with an internal pressure of 0.2 MPa, or about 2 atmosphere, for over 10,000 hours without breakage. Since the battery cases did not break, there was clearly no irreversible deformation beyond an expansion limit of the battery container.

With regards to claim 2, it is noted from a comparison of Figs. 3 and 4 of the Shimakawa et al. patent that that the cells include a plate group, and the cells and the electrode plates are stacked in the same direction.

### ***Response to Arguments***

Applicant's arguments filed 16 March 2004 have been fully considered but they are not persuasive. Applicants assert Shimakawa fails to teach a combined battery in which the binding force is selected by considering the balance position between an expanded cell and a compressed cell from the F-S curve, based on the number and compressibility of the cells. However, applicants' claims are directed to a battery with a plurality of cells bound by two end plates. Applicants claims require battery cells are bound by the two end plates under the condition that no more than a predetermined amount of irreversible deformation is caused in the battery container. Shimakawa et al. clearly disclose such a battery. The actual batteries claimed by the applicants and Shimakawa et al. are not distinguished, even though applicants and the prior art do not use identical description of the batteries. The Court of Customs and Patent Appeals has long recognized that an invention may be described in different ways and still be the same invention. See *Kennecott Corp. v. Kyocera International, Inc.* 5 USPQ2d 1194 (CFAC 12-22-87) and *In re Kirscher*, 134 USPQ 324 (CCPA 1962).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol Chaney whose telephone number is (571) 272-1284. The examiner can normally be reached on Mon - Fri 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Carol Chaney  
Primary Examiner  
Art Unit 1745

9 July 2004